

From ab4el.com Fri Jun 24 15:40:01 1994
From: HAK1%IC%DCPP@bangate.pge.com
Subject: #35 ASR gears

I am looking for some parts to restore a Model 35 ASR TTY machine. These are the main gears. From the manual they are:

TP-159284 and TP-159285

If no one has these parts is there any supplier out there that carries these parts ?

Howard AD6Y
hak1@pge.com

From ab4el.com Fri Jun 24 18:00:47 1994
From: David Josephson <david@josephson.com>
Subject: Re: #35 ASR gears

> I am looking for some parts to restore a Model 35 ASR TTY machine. These are
> the main gears. From the manual they are:

>

> TP-159284 and TP-159285

>

> If no one has these parts is there any supplier out there that carries these
> parts ?

>

Call RTTY Electronics in El Sobrante at 510-222-2989. He has all these parts and knows all the Teletype tricks.

--

David Josephson / Josephson Engineering / San Jose CA / david@josephson.com

From ab4el.com Sat Jun 25 04:39:53 1994
From: David Josephson <david@josephson.com>
Subject: Re: #35 ASR gears

> > I am looking for some parts to restore a Model 35 ASR TTY machine. These are
>

> Call RTTY Electronics in El Sobrante at 510-222-2989. He has all these
> parts and knows all the Teletype tricks.

Oops, sorry, error in post. Tel no is 510-222-3989. Talked to his brother today, better move fast before he pushes all the tty parts

into the bay...

--

David Josephson / Josephson Engineering / San Jose CA / david@josephson.com

From ab4el.com Thu Jun 23 16:56:20 1994
From: don merz <71333.144@CompuServe.COM>
Subject: AWA Review Volume I

In case you don't get the little update catalog flyers from Antique Electronic Supply--or maybe you missed it--the latest one lists a closeout on the AWA Review Volume I. This has been out of print for many years and is well-worth owning. It has excellent articles on Tesla, Farnsworth and Godley along with "A Brief History of the National Company" which includes a listing of "most" of the amateur and commercial gear made by National from 1929 to 1960. It's \$9 and worth it. FYI.

From ab4el.com Fri Jun 24 02:22:43 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: AWA Review Volume I

ul> From: don merz <ulowell!CompuServe.COM!71333.144>

ul> In case you don't get the little update catalog flyers from Antique
ul> Electronic Supply--or maybe you missed it--the latest one lists a
ul> closeout on the AWA Review Volume I.

I might get it for that National article. What caught MY eye, though, was the 6AK5s at 55 cents apiece! I was buying them left and right at the 'fests when I first got the 390A and my dad had TWO of the darn things in the tube box.....

I hope that AES doesn't go downhill in any way with the change in ownership. We'll see! Certainly am glad they're around.

--Andy

... Antique Elect Supply 6221 S Maple Ave, Tempe, AZ 85283 (602) 820-5411

From ab4el.com Thu Jun 23 17:07:29 1994
From: "Mark Glusker" <glusk@mechcad3.esd.sgi.com>
Subject: Re: AWA Review Volume I

Don says:

> closeout on the AWA Review Volume I

and Antique Radio Supply says:

"None left."

From ab4el.com Thu Jun 23 21:48:04 1994
From: Mark Shelhamer <ms@space.mit.edu>
Subject: BA Images, ftp site

BA-lovers:

Prompted by some discussion on this mail list, I have set up an anonymous ftp site for the archiving of pix of classic boatanchor rigs (or any other radio equipment, for that matter).

The site is ishtar.med.jhu.edu
Change to directory pub/radio. I have put a few test images there (in gif format). To upload your images, change to directory pub/radio/INCOMING. I will periodically review the INCOMING directory and move appropriate images to pub/radio.

Based on the number of images people upload, I may have to limit this to "classic" BAs or some other sub-category. Please try to limit use mainly to off-hours (east coast time).

Hopefully, this service will help people learn more about these fine items, so they can identify potential purchases at hamfests and get a look at some things that you just don't see even at hamfests.

I can also scan images, if you send me a photograph.

Mark
WA3YNO

From ab4el.com Fri Jun 24 08:42:09 1994
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>
Subject: Re: BA Images, ftp site

> Prompted by some discussion on this mail list, I have set up an
> anonymous ftp site for the archiving of pix of classic boatanchor
> rigs (or any other radio equipment, for that matter).
>
> Mark
> WA3YNO
>

I tried it and it works fine. Nice pictures too. I hope there'll be more of them soon. Thanks Mark.

George SV0KA

From ab4el.com Fri Jun 24 02:21:20 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: BA safety, grounding, test bed

ul> From: "James H. Haynes" <ulowell!cats.ucsc.edu!haynes>

ul> Which reminds me - an outlet with a GFI is probably a good thing to
ul> have around boatanchors too.

I got a nice Eico variac supply at the last flea, for \$15. Good for 8 Amps, fused before and aft, metered with current and voltage. Nice find! I was looking for a variac and meters to build my own, but this saved me the trouble.

The ideal setup would be an isolation transformer leading to a metered variac and ending with a 3-wire outlet. Hmm. I smell an Electric Radio article! Even better would be some sort of "current alarm" such that if something draws more than X once you set the level it will power off. Might be good for powering up -- and leaving on to "condition" -- the old things.

--Andy

... Drakes: black 'n' grey and they keep your cat warm...

From ab4el.com Fri Jun 24 10:31:00 1994

From: wbrco@slacc.com

Subject: BA tips and grounds

I had the same problem with my SP-600 popping the GFI. What I found is the unit had .05 bypasses instead of the .01's that were on the schematic. Replaced them and it fixed the problem. If that hadn't fixed the problem, I would have removed the GFI and just gone with a green ground. The box that I was plugged into was right on the panel, and my house is VERY new, so I thought I might have had a bad GFI. Don't fool yourselves, nothing is better than a good ground.

FYI, for our phone room here in the office, we will run a pair of 3/4" X 10 ft ground rods into the basement floor, and cad weld them to 500 MCM cable to assure us of a quality ground.

From ab4e1.com Fri Jun 24 10:05:50 1994
From: KANAMAA%AMGATE%MATRXA@randb.abbott.com
Subject: BA's in Boob Toob Shows

>From: Kana, Michael (D9CY)
Date: Fri, Jun 24, 1994 8:42 AM
Subject: BA's in Boob Toob Shows
To: boatanchors
Howdy All

In Andy's posting, he mentioned some BA's in a couple of TV shows. I think that in ALF the gear was of the Heath variety. As far as MASH goes, I don't ever recall seeing any radio gear but something like a field phone op's plug board although in some episodes where a radio was used (like to listen to the Dodger's or Toledo Mud Hens games....) it looked like a military amp. My memory fails me since I have not watched TV in about 6 years...

I think in one of the old 'Leave It to Beaver' shows, there might have been some old gear like BC611's or maybe it was the Munsters. In Gilligans Island, I think the gang had an old Hallicrafters set.

Ahhhh.... good ol' Gen X TV trivia with a hint of tube stuff.....

73's de AA9IL
Mike Kana

From ab4e1.com Fri Jun 24 02:22:32 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: BAs in movies

ul> From: "Lee K. Gleason" <ulowell!mwk.com!gleason>

ul> I was watching "The Falcon and The Snowman", the movie about
ul> the rich kid who sold out a bunch of TRW satellite secrets
ul> to the Reds, because he was misunderstood, and noticed some BAs.
ul> In a couple of scenes inside the TRW code room, you can see
ul> some Collins receivers in a rack against the wall...I couldn't
ul> tell which kind...

Ah, and you sparked me into remembering something from a movie...in PUMP UP THE VOLUME, the kid's pirate radio transmitter was one of those huge but beautiful HP signal generators. I think it was the VHF one all right, and it probably had FM. Definitely wouldn't have been STEREO though!

...and those silly vans with "FCC" on the side of them.....

--Andy

... Tube radios SMELL NICE.

From ab4el.com Fri Jun 24 12:51:12 1994
From: "Bob Scott" <bob_scott@cpqm.saic.com>
Subject: Re: Big Boatanchor Bash in C

re>Big Boatanchor Bash in Central GA
I will be heading down to Walt Disney World on that preceeding
Thursday or Friday with the family (grad present for my 18
year old). I wanted to go to the West and check out all
the National Parks in Idaho, Colorado, etc, but was
outvoted. Anyway, now all I got to do is figure out some
way of making a wrong turn and end up in Perry on Saturday.
Maybe I can convince them that it is on the way from Virginia.
Then there is the problem of finding room in the car for
the 'souvenirs'....

From ab4el.com Fri Jun 24 11:04:59 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>
Subject: Re: Boatanchor Safety Question

>Toss the bypass caps, put in a 3 wire line cord (make sure it's wired
>right) and keep going. If you want to suppress RF on the power line,
>get one of those snap-on ferrite split beads. Quick, simple and
>cheap!

>

>Avoid the boatanchor tingle! It ain't contagious, but it's deadly!!

>

>

>73,

>

>Larry, KQ4BY

>

OK Guys,

What should one do, step by step, to get rid of those line bypass caps on a
R390A?

From ab4el.com Thu Jun 23 18:02:30 1994

From: Earl=Morse%EMC=Srv%Eng=Hou@bangate.compaq.com
Subject: Caps & leakage current

Almost any consumer product today has capacitors to ground on the AC lines. Especially in computers where they are required to suppress RFI to meet FCC regs.

Underwriters Laboratories has a maximum leakage requirement of .5 mA. The maximum capacitance to ground that does not violate that specification is .01 uF. .1uF will give you a leakage current of 5 mA.

Of course, this would require a grounded chassis and a fused input of the proper value. Cap fails, fuse blows, nobody dies. This UL leakage specification has only been around since 1972 so most boatanchors won't meet it.

A good grounded chassis is the best bet to keep any internal failures from presenting line voltage to a user.

The line filters are probably not needed if all you do is listen. If you have a transmitter next to that old BA receiver you might reconsider removing them.

Earl Morse
KZ8E
kz8e@bangate.compaq.com

From ab4el.com Fri Jun 24 13:57:52 1994
From: tech@cs.athabascau.ca (Richard Loken)
Subject: Caps & leakage current

Earl says:

>Almost any consumer product today has capacitors to ground on the AC lines.
>Especially in computers where they are required to suppress RFI to meet FCC
>regs.

...

>A good grounded chassis is the best bet to keep any internal failures from
>presenting line voltage to a user.

I disagree with most of the net about removing line filter capacitors and instead agree with Earl. Don't dump those bypass caps, replace them with safer ones.

You are strongly urged to get 0.01 ufd capacitors UL rated for 120V AC. They are in the catalogue and they cost a lot more than the 1KV 0.01ufd ceramic discs but this is not the place to save money. They are made and certified for this very job, and don't forget that 3 pling pling, what use is bypassing to nowhere anyway?

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
Athabasca University : tuques we wear, our heads
Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Aurthor Black

From ab4el.com Fri Jun 24 14:26:26 1994
From: mallick@ausable.crd.ge.com (John Mallick)
Subject: Re: Caps & leakage current Date: Fri, 24 Jun 94 11:25 MDT From:
tech@cs.athabascau.ca (Richard Loken)

...

I disagree with most of the net about removing line filter capacitors and instead agree with Earl. Don't dump those bypass caps, replace them with safer ones.

You are strongly urged to get 0.01 ufd capacitors UL rated for 120V AC. They are in the catalogue and they cost a lot more then the 1KV 0.01ufd ceramic discs but this is not the place to save money. They are made and certified for this very job, and don't forget that 3 pling plung, what use is bypassing to nowhere anyway?

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
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Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Aurthor Black

Months earlier, Jim Kearman recommended looking at Panasonic line-rated bypass capacitors, available from Digi-Key. They're UL listed for the applications we need.

John WA1HNL

From ab4el.com Fri Jun 24 13:30:07 1994
From: tech@cs.athabascau.ca (Richard Loken)
Subject: CQ Fire Fly?

Fire flies have differant signalling rates depending on species. I read once about a female of one firefly species that emulates the flash of another species and then eats her suiter. (no ribald comments please:))

Fireflies are rare up here in the Canadian prairies but we have them where I presently live in the bush around town, they flash a dit every four seconds. I had never seen one before I moved here ten years ago. I was walking in the woods when I saw something flash to my right about four feet off the ground. I turned and looked and it flashed again, I thought some joker and left some kind of electronic device lying around and went over to the shrub, leaned forward to look around for the source and got japped in the eyes from about

6 inches. After the worst of the blue spots settled down I put him (her, I imagine) in my pocket and took him home. He was a beetle, about 1/8" long and darned ugly under a magnifying glass.

Our fireflies almost never come into town but remain in the bush where you see them only occasionally, the best time is just as it is almost totally dark and when it is starting to lightly rain. About midnight this time of year.

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
Athabasca University : tuques we wear, our heads
Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Aurthor Black

From ab4el.com Fri Jun 24 14:52:10 1994
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>
Subject: Re: CQ Fire Fly?

Thanks to Richard for his report from the Canadian Plains.

I did a small survey last night:

Most fireflies blink short dit's only.
Some show a dah while swooping upward in flight.
One showed dit dit while flying straight.

Any other reports?

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

From ab4el.com Fri Jun 24 23:06:14 1994
From: "penson" <penson@geom.umn.edu>
Subject: Re: CQ Fire Fly?

At the risk of sounding like I have no social life...I did some experiments just the other day re calling CQ with fireflies. We have a great many of the luminous critters here in MN. I wired up a 555 IC and a green LED to flash at about the same rate as the fireflies here. I was able "work" quite a few fireflies in only a few minutes. They were highly attracted to the LED and would fly right in and land on it. I guess they were trying to mate with it. Imagine their surprise ;)

Most of these guys are QRPers.

Chuck

From ab4el.com Sat Jun 25 02:46:47 1994
From: "penson" <penon@geom.umn.edu>
Subject: Re: CQ Fire Fly?

At the risk of sounding like I have no social life...I did some experiments just the other day re calling CQ with fireflies. We have a great may of the luminous critters here in MN. I wired up a 555 IC and a green LED to flash at about the same rate at the fireflies here. I was able "work" quite a few fireflies in only a few minutes. They were highly attracted to the LED and would fly right in a land on it. I guess they were trying to mate with it. Imagine their suprise ;)

Most of these guys are QRPers.

Chuck

From ab4el.com Fri Jun 24 02:21:01 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Cruddy Xeroxes etc.

ul> From: CHRIS _ PRUSSING <ulowell!tundra.alaska.edu!RMCP>
regardless of that, this goes to Jim Dillon.....

ul> Well, Ed must have patronized Fast Ed's Kinky-Print Drive Thru because
ul> such was not the case. The copies are on the way back to Ed!

ul> BTW, if you are thinking of buying Communications Receivers 3rd Ed.
ul> because you have heard the photos are "greatly improved" forget it.

Darn right! I looked one over at a ham flea and wasn't impressed enough to buy it myself. I admire Mr. Moore for taking on the task; I just wish it were prettier! My friend has the 1st Ed. so I can use that for reference once in a while.

The Ham Trader Yellow Sheet "buyers' guides" are useful, but they have certain rigs missing and the pictures of some of the radios are (seriously) grey blobs.

I still say that the ARRL could make a killing by taking all the interesting, representative ads from QST from about 1950-1970 and making a high quality book out of them, arranged by manufacturer. If they don't think this is a 'saleable' item to the Kenwood fans, then they should ask one or two of us Boatanchor people what we'd pay for such a thing. I'd pay \$40 for a 200-page book with high quality ad photos! Would you? (I paid \$40 for the whole HTYS guides.)

ul> Can I send anyone a copy of the latest Sangean or Yaesu brochure?
ul> Jim Dillon RMCP@Tundra.Alaska.Edu

No thanks; if North Korea does attack, finding Sangean parts will be like trying to round up a WD-11! :-D

--Andy

... Certain people have traded their Hollow-state Souls for a 3TF7 !

From ab4el.com Fri Jun 24 02:22:36 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: CWIsts

RDK> From: ulowell!csemail.cropsci.ncsu.edu!rdkeys (R. D. Keys)

Great advice on the CW procedure, Bob. I just wish the "shave and a haircut" thing would go away. <grin> When I was active in QRP (great to have people pile up on YOU) in '81-2 people used to ask me what kind of keyer I used. I used a straight key.

CW, done well, is a slower-than-voice joy. Thankfully, in tuning around on the 2-B, I still hear great CW ops out there.

RDK> My recommendation is to NEVER use KN unless you really really really really DO mean to exclude all other hams from joining your QSO.

I learned to use KN once the contact was established -- after calling CQ or whatever -- in some ARRL pub. Handbook? Learning the Radiotelegraph Code?

> Still Novice (both in license class and learning status, and
> proud of both).... 73 de Kevin, KB9IUA

RDK> Nothing in the world wrong with being a novice, in any way. Heck, I
RDK> am the world's longest run novice, in my estimation.....I took over
RDK> 7 years to get the higher than novice licenses..... EEEK, I was king
RDK> nerd for sure, on that one, but.....we all have to start at the bottom
RDK> of the totem pole, and we all will work our way up that pole.

I've been a Novice for 13 years. Does that surprise any of you people that have enjoyed my BA posts? It shouldn't -- being a Novice, now that you can renew the license, doesn't necessarily mean "beginner." I had designs to get Novice QRP WAS at some point.... Now I would like to get into the AM fun on 3885 or the Drake net on 3865 Sats enough that I absolutely must get the General this year.... My code speed is over 20 (and was, back when I was active, thru practice -- yes I used a keyer at that point!) but I have to brush up on theory. Working with ICs for so many years made me forget about inductance/reactance/etc. I will keep the call -- I like it and it sounds good on CW.

Speaking of keyers, anyone got a manual for an Eldico EE-3A? Smallish grey TWO TUBE keyer with a big red paddle. Mine sends at 30 WPM no matter what the setting (leaky caps anyone?) and I don't know the pinout of the terminal strip in the back.

RDK> See you 0400UTC Saturday morning (Friday Night).

Would like to. Either I get more satisfaction with the indoor loop/tuner experiments or I'm going to have to negotiate for a reel-in ant with my landlady. I'm dying to put the 2-NT on the air!

--Andy

... Marauders and Comanches battle Vikings and Apaches! Film at 11!

From ab4el.com Fri Jun 24 01:11:01 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: DoggyComs

to: boatanchors@gnu.ai.mit.edu

Hello Gang!

After reading several messages re. strange transmissions going on in mode K9 emission ("GGZ; Are You A Dog?"), I've gotta throw in MY two cents worth.

Around K9TA we've got two alternate operators, namely Shane (10 year old Irish Setter), and Bozo (same breed, just over 2 years old). Shane's idea of a good time is a 7 or 8 hour nap, but Bozo's behavior is somewhat more disturbing. Maybe it holds a warning for us all...

I am absolutely convinced that Bozo is a reincarnated Ham, or at least an electronics tech.

Yeah, some of you think that I've taken one high voltage hit too many, and that I'm ready for the rubber handkey net. Could be, but I don't think so.

All I wanna know is what horrendous act she committed that caused her to be reincarnated as an Irish Setter! It's is obvious that she's absolutely fascinated by any and all electronic gadgets; she's practically in love with my electronic keyer, but she clearly finds it a major hardship that she doesn't have an opposable thumb so that SHE can man the keying lever (or the pliers, scope probe, or whatever is relevant). I've tried letting her send (on a code practice oscillator) with her nose on both keyer and bug, giving her a chance to tell me what it is that she wants to say, but her fist (snoot?) is strictly QLF!!!

I always knew she wanted to help with gear repairs, but it finally lead to disaster one day when my trusty old Tektronics 545 scope broke down. I popped the covers, and while I was at it I pulled the fan housing on the back to clean the air filter, exposing an 8" ventilation opening.

Knowing Bozo's love of sniffing electronics, and knowing that there's 14 KV of accelerator voltage in the scope, I positioned myself so the hot circuitry was blocked by my body. Just to cover all of the bases, I moved the soldering iron (a huge old American Beauty) to a safe location far above doggy reach.

I was probing around with the meter and really getting into the job, and Bozo was momentarily lost to my thoughts. Suddenly, I heard a loud ZING!!!, followed by a sharp yelp of pain. When I saw Bozo she was on her belly, crying in the corner, holding her snoot with both paws.

I blew it. I'd forgotten the air cleaner / fan shroud (soaking in a bucket of water), and she decided to see what the cooling fan smelled like! She wasn't cut (amazingly), even tho Tektronix used a pretty hefty motor on the fan (with forty some-odd tubes, they HAD to!). I guess the 5 blades kinda spanked the end of her nose at 1800 RPM.

Ever since that incident whenever I roll out the scope cart ol' Bozo just backs in the corner and glares angrily at the scope. Occasionally she'll bark or growl at it, but she definitely keeps her distance; she's holding a heavy duty grudge against that scope!

73's,

Tom "Mr. T." Adams, K9TA

From ab4el.com Fri Jun 24 02:21:21 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Drake 2-B

ul> From: Richard E Robinson <ulowell!uncc.edu!rerobins>

ul> I've been a QRP cw nut since 1966, and the 2B IMHO is the best cw
ul> receiver ever, and I've had quite a few receivers. With the 2BQ, and
ul> the 2B, I have yet to have QRM problems on any band. The R8, when you
ul> get used to it, is just as good. In fact, the filters are sharper on
ul> the R8, but it just don't glow in the dark.

I would agree about the 2-B on CW. The 0.5 kHz filter has a dandy response, even without the help of the 2-BQ. If you missed my post, my 2-B seems to put a hum out when used with the q-mult. I tried the 2-AQ which works fine with the 2-A, and it hums too. Any guesses? Bad bypass cap in the grid line? The 2-B by itself has no hum.

ul> Good 2LF hunting.

Oh, one might come by. After all, the RAS noise blanker trade for the National NBFM adapter came by here on the BA net!

ul> Oh, before I go. I remember building a box for my 2C, that I put a 12
ul> crystal holder in and a 12 position switch, so I could switch in 12
ul> different crystals into the external socket of the 2C. I'd like to
ul> try a similar operation for the 2B to cover some of the utility freqs.
ul> It's going to make a dandy ute receiver with the Faxcap.

I never seem to care too much about warm-up drift. (Read some of the E/R In Uniform reviews sometime.....) The 2-B probably drifts about 5 kc from turn-on to 5 mins, but after that it's nice and stable. I wish the tuning was even smoother though. The large dial, however, is nice. Wish the 4-series stuff had as large a knob. As for crystals, I buy HC-6/U crystals here and there and had a few for 2-B shortwave bands in the stash. Hmm, let's see if I remember. +/- 4 MHz of crystal freq for the 2-B (-A) (-C?) and -11.1 of crystal freq for the 4-line! Keep those eyes peeled at hamfests. Sometimes (if you'll settle for -18.7 kHz offset or something) you can find something "close enough" to the band you really want.

--Andy

... Yes, Virginia, I do remember the #47 dial lamp!

From ab4el.com Fri Jun 24 00:25:28 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Drake 6M & 2M Converters

ul> From: ulowell!netcom.com!dgf (David Feldman)

> Drake 6M & 2M Converters

ul> CC-2 is a converter console (or is it CC-4??)

ul> SC-2 is a receive converter for 2M->20M

ul> SC-6 is a receive converter for 6M->20M

Thanks for the excellent, excellent info David! It's been saved to disk for when I find one of those beasts. I've seen references to an SCC-1 (I think) calibrator which went with the receive converters. Ever seen one?

My Dad told me that "someone" had written a history and "discography" (product-ography so to speak) of Drake. CAN ANYONE CONFIRM THIS -- and where can I get this book?

ul> They were advertised frequently in the early 70's - I think PAYNE
ul> RADIO showed the full drake line with transverters in some of their
ul> full-page ads.

I'd like to find some Drake catalogs from the 4-line era. Or
else I'm going to have to write that darn Drake book myself! Think Drake
will supply the photos? <grin> <bet they will! free advertising>

I have next week off and barring heatwaves I'm going to get my
R-4A going again. Looking forward to it!

--Andy

... Tube radio? Heh....Mongo WANT.

From ab4el.com Fri Jun 24 11:02:00 1994
From: dgf@netcom.com (David Feldman)
Subject: Re: Drake 6M & 2M Converters

> ul> From: ulowell!netcom.com!dgf (David Feldman)
>
> > Drake 6M & 2M Converters
>
> ul> CC-2 is a converter console (or is it CC-4??)
> ul> SC-2 is a receive converter for 2M->20M
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>
> Thanks for the excellent, excellent info David! It's been saved
>to disk for when I find one of those beasties. I've seen references to
>an SCC-1 (I think) calibrator which went with the receive converters.
>Ever seen one?

I have heard of them but don't have one. Due to my own station having so
many tubes and such, I just transmit a carrier on 6, 2 or 432 and use my
small (non-tube) frequency counter to figure out where I am. Otherwise I
go crazy trying to keep all of the xtals on spot.

Thanks for the kind words; I was not sure if Drake stuff is considered BA
enough for this group, and won't labor on any more on this topic unless asked.

73 Dave WB0GAZ dgf@netcom.com DM79

From ab4el.com Fri Jun 24 21:53:45 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Drake R-8 Feet

to: boatanchors@gnu.ai.mit.edu

Hello Andy.

Re. your comments about the flimsy front feet on the Drake R-8:

THANK YOU!!!

I thought that I was the only jerk clumsy enough to bust 'em off!!!

Re. free replacements:

Not as far as I know! They stuck it to me to the tune of about \$3.00 per foot for replacements. Besides that, the flip-up levers are sold as separate items!

Those damned feet are about the only complaint I've got with the radio (everybody else I know of who's used it bitchs about the wierd operating system in the microprocessor!).

73's,

Mr. T., K9TA

From ab4el.com Fri Jun 24 02:21:38 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Electric Radio -- on Internet maybe?

ul> John Staples, W6BM
ul> Berkeley
ul> staples@lbl.gov

Greetings to another Electric Radio alumnus! Does Barry Wiseman have an Internet address, yet? He's missing a goldmine of chatter and suggestions here on BA!

--Andy

... Friends don't let friends use screen modulation.....

From ab4el.com Fri Jun 24 10:04:30 1994
From: "Kearman, Jim" <jkearman@arrl.org>
Subject: RE: Electric Radio -- on Internet maybe?

>Does Barry Wiseman have an Internet address, yet?

Barry's been here for some time. He's just too modest to sound off all the time.

His email address is bwiseaman@csn.org

73

Jim

From ab4el.com Fri Jun 24 02:22:27 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Famous dude?

ul> From: ulowell!randb.abbott.com!MATRXA!AMGATE!KANAMAA

ul> Sounds like the start of a nice thread...

ul> My first BA was an old Howard receiver. Great for SWling and

ul> listening to all of 40m at the same time! :-)

Yep.... I was exposed to HAM RADIO for many years but my dad (an Extra) never had a general coverage receiver on the bench. So one day, I got a little Radio Shack crystal set at a garage sale for 10c, and pulled the slug out while tuning around. Instant 49 meter shortwave! I heard the interval signal (station theme) of Radio Nederland, and eventually heard the ID. When the carillon was playing, I couldn't understand why anyone would practice like that over the air. <grin>

My dad then explained that I was listening to "shortwave" and lent me his dad's Air Castle table radio. God Bless green magic eye tubes.

ul> My first transmitter was 14 years later - a DX100B - hardly a lil
ul> anchor.....

I plunked down \$110 for a nice DX-100 in 1981 at a local ham auction. Shocked my dad -- I wasn't a ham yet -- and split the seams of my corduroy pants as I lifted the darn thing. I never actually got on the air with it. When I got the Novice ticket (still KA1GTT) I was very active on QRP with my dad's Yaesu FT-301. (A dandy looking solid state rig if I do say so.) I sold the 100 to a friend who also traded me a Heath SB-313 for it. He may or may not have used it for illicit purposes.....I didn't ask!

ul> Mike Kana

Am I having a brain spasm or did I see your picture on the cover or inside of an issue of Electric Radio a few years back?

--Andy

... Conscience alert: is that rig you call "mint" REALLY mint?

From ab4el.com Thu Jun 23 16:29:18 1994

From: bwb%csrvcs1.triad.com%triada.triad.com@triada.triad.com (Bruce Bacon)

Subject: Re: FAQ: VARIACs

In a previous message, Roy Morgan said:

|
| The word "Variac" was a registered trademark of the General Radio Company
| of Concord, Massachusetts, but the company's gone, and the name has become
| a generic term applied to all similar devices. GR made the best, IMHO.
|
| Finally, there's nothing like a variac.
etc...

What are some sources for new Variacs? I've seen a few at the swaps,
but are usually old and beat up. I've looked in the Fair Radio catalog,
but I've either missed 'em or they weren't there. Any ideas?

--

-Bruce Bacon (bwb@triad.com) KE6GLS ** disclaimer ** - My views, not theirs.

From ab4el.com Fri Jun 24 02:22:33 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: First li'l anchor

ul> From: "Bob Scott" <ulowell!cpqm.saic.com!bob_scott>

ul> Well my first anchor was a KnightKit Oceanhopper which I believe is
ul> somewhat related to the SpanMaster.

Someone wrote an Electric Radio article (I believe) about the OH
and has a little "club" and newsletter for enthusiasts. Wish I had the
index handy....

ul> Sometimes I miss those days. Radio seemed more exciting then.

What? Isn't it exciting to hand over your Visa card and get your
new radio in a box and your new antenna in a plastic bag?

I tell ya, guys, the electrons are still the same. It's the
FLAVOR that's changed -- listen to 3.910 sometime. I'm glad fools like
us -- stuck in old technology for the FUN of it, knowing its limitations
-- are still getting our kicks with radio.

--Andy

... I'm perfectly happy with my radical Tubist viewpoint!

From ab4el.com Fri Jun 24 02:22:39 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: First Lil' BA revisited (and typos corrected).

FROM: R. D. Keys
ABOUT: First Lil' BA revisited (and typos corrected).

RDK> Sorry about the horrid amount of typos on the first round of this.
RDK> My apologies to the group for tuesday morning typing blues.....

RDK> Bob

RDK> *****
RDK> Old Tales of Howards, ARC-5s, and Ham Wannabes..... Revisited:
RDK> *****

Bob, that was really great. Why not send it in verbatim (or with additions) to Barry Wiseman of Electric Radio? I'll bet he'd love to publish it. I think the other BA people would agree..... Address for ER in the tagline below.

--Andy

... Andy likes: ELECTRIC RADIO, P. O. Box 57, Hesperus, CO 81326 \$28/yr.

From ab4el.com Thu Jun 23 19:17:08 1994
From: Hugh D. Stegman <driver8@red-eft.la.ca.us>
Subject: Re: GGZ authenticator

>NV6H can confirm that I'm not making this up. [Dogs barking GGZ]

This is true. There was a dog at the old KB6OWB QTH that would GGZ far into the night, attempting to raise other K9 units.

Later, at my former QTH, the neighbor's old dawg woke us up one night, which never happened. (That old dawg wouldn't hunt.) Yes, that's right. GGZ.

Has to be some sort of canine network prosign for challenge and authentication.

Hugh NV6H
"Who says you can't teach an old dog Morse code?"

From ab4el.com Fri Jun 24 14:01:25 1994
From: Joe Reda/HQ/3Com <Joe_Reda/HQ/3Com%3COM@3mail.3Com.COM>
Subject: Grounds?.

I've been following with some interest the threads about grounding. So if water pipes are probably inadequate, and driving in a stake isn't much better (and I can't do that where I live), what does an apartment dweller do when he wants to ground his trusty 'ol NCX-5 transceiver? All suggestions welcome!

Joe KC6TXU

(with a second on that HP Laserjet interface with 12AX7s! How about a VGA monitor with 6SN7GTs in the vertical circuits!)

From ab4el.com Fri Jun 24 14:29:28 1994
From: "Kearman, Jim" <jkearman@arrl.org>
Subject: RE: Grounds?.

>what does an apartment dweller do when he wants to ground his trusty
>'ol NCX-5 transceiver? All suggestions welcome!

Install three-wire line cords and bond all chassis together with heavy gauge wire. You can strip the braid off coax or pay the gougers at hamfests who sell the stuff by the foot.

You don't get zapped because the case is hot. You get zapped because there is a difference in voltage between two conductors to which you have connected your body. If every metal object you or anyone else can possibly touch is at the same voltage, you can't be harmed.

73

Jim

From ab4el.com Fri Jun 24 02:22:41 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: gullible hamfesters :-)

ul> From: "Kearman, Jim" <ulowell!arrl.org!jkearman>

>The dials are a bit dingy

>though so I might try cleaning them with care. Any suggestions? A lit
>dab with a wet paper towel? (Obviously no Windex!!!!)

ul> Leave the dials alone. A towel moistened with slightly soapy water did
ul> in the markings on my BC-348 dial. Fortunately, I was able to get a
ul> junker. Now, if I could only get the dial OUT of the junker....the pin
ul> won't budge.

 Hmm, a tiny nail set and a ball-peen hammer gave no luck? (I
removed an R-390A gear from the pinned collar that way, easily.)

 I'll check the HQ-170 dials before I do anything. If they're
embossed and painted from the back it will be safe, but otherwise I'll
leave them in dingy but unwashed-away condition. At any rate the rest of
the cabinet's very nice!

 Hey, I notice you're giving a BA talk. Are you doing a repeat
for the Boxborough MA ARRL fest, by any chance? Make it sometime I'm not
in the flea area searching for the fellow with the \$350 HRO-500 that I
passed up last year.....

--Andy

... Dahl Xfmr's: 5869 Waycross Ave, El Paso TX 79924 (915) 751-2300

From ab4el.com Fri Jun 24 10:19:19 1994
From: "Kearman, Jim" <jkearman@arrl.org>
Subject: RE: gullible hamfesters :-)

> Hey, I notice you're giving a BA talk. Are you doing a repeat
>for the Boxborough MA ARRL fest, by any chance? Make it sometime I'm not
>in the flea area searching for the fellow with the \$350 HRO-500 that I
>passed up last year.....

I'm giving a talk on boatanchors at the Perry, GA hamfest because the
sponsoring club is paying for my airline tickets and KQ4BY is hosting me at
his house. This is not a company-sanctioned trip, but I couldn't have gone
otherwise.

Here's how it works: Headquarters employees' expenses to give talks are paid
by the organization if:

1. The talk is at an ARRL-sanctioned State, Division or National convention,
and
2. The employee is invited by someone connected with the event

Slots go fast, and I'm not giving anything away when I say that most convention attendees are ARRL HQ management. If you want an ARRL employee to speak at your convention you have to get going as soon as you hear about it and set up a forum, then request a speaker, either through the convention Chairperson or directly to your Division director. Going through the Chairperson is more appropriate.

I used to do talks on my own nickel in New England, until I cracked up my car last fall on an icy Massachussetts road I wouldn't have been on otherwise. As I was not specifically authorized by the company to go, I had to eat the deductible, etc. I've reluctantly decided to give up such freebies.

My talk at Perry, GA is going to be about safely restoring vintage gear to service. Most people go to hamfests for the socializing and the flea market, so we'll see just how popular a talk this will be! Maybe it will rain and they'll have to come inside anyway! The best turnout I ever had on a QRP talk was on a cold, blustery fall day. Whatever, I look forward to meeting many boatanchors readers in Georgia.

73

Jim

From ab4el.com Fri Jun 24 20:45:24 1994
From: halwaite@netcom.com (Hal R. Waite)
Subject: Heathkit Variable Isolated AC Supply Model IP-5220

The above bench unit is an excellent answer to both line isolation and variable voltage. Isolated variable voltage is available at 0-140AC/3A and non-isolated 120VAC/10A. The unit is metered at both one amp and three amps full scale; separate meter for voltage.

These units were popular for commercial radio and television repair and are still available but difficult to locate. Mine sees constant use on AC/DC sets and boatanchors.

Hal K4GFI/7

From ab4el.com Fri Jun 24 11:43:00 1994
From: janderson@polycom.com
Subject: Hollow State Newsletter

Does anyone have the correct address for "Hollow State

Newsletter"? I tried the 12072 Elk Blvd. Riverside, CA address,
and my letter was bounced back.

Thanks,

- Jeff, WA6AHL

From ab4el.com Fri Jun 24 14:17:13 1994
From: janderson@polycom.com
Subject: Hollow State Newsletter

Does anyone have the correct address for "Hollow State
Newsletter"? I tried the 12072 Elk Blvd. Riverside, CA address,
and my letter was bounced back.

Thanks,

- Jeff, WA6AHL

From ab4el.com Fri Jun 24 21:08:35 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Holy Hot Chassis, Batman!

to: boatanchors@gnu.ai.mit.edu

MENACHEM!!!

In one of your latest messages you asked what rating AUTOTRANSFORMER you
should get.

WRONG, WRONG, WRONG!!! MAYBE EVEN FATAL!!!

An AUTOTRANSFORMER has only ONE winding. It is occasionally used for voltage
changing. It is NOT, repeat NOT THE SAME THING AS AN ISOLATION TRANSFORMER!! IT
HAS NO ISOLATION CHARACTERISTICS WHATEVER!!! The two devices are NOT interchan-
gable in this application!

73's,

Tom, K9TA

From ab4el.com Fri Jun 24 12:56:03 1994
From: post@ouvaxa.cats.ohiou.edu
Subject: home-brew isolation transformers

Ohio University Electronic Communication

Date: 24-Jun-1994 12:05pm EST

To: Remote Addressee
(_MX%"boatanchors@gnu.ai.mit.edu")

From: Richard Post
Services
POST

Dept: Instructional Media
Tel No:

Subject: home-brew isolation transformers

>BTW, big transformers like this COST if you're not into scrounging.

Isolation transformers are relatively easy for a home-brewer to set up, and required IMHO for any service on or use of AC-DC sets and servicing TV sets.

All you need is two identical transformers wired back to back. Check your junk box to see if you have a couple of weighty but identical power transformers. For example, suppose you find a pair of six volt transformers. The first transformer is wired normally to step down to six volts. The second transformer is wired so that its six volt winding is connected to the six volt winding of the first transformer. The second transformer then steps up the voltage back to 120. Bingo, double isolation. If the transformers are physically different in size but the voltage ratings are the same, I suggest using the smaller of the two for step-up. Your volt-ampere rating is limited to that of the smaller of the two.

Another option is to use any transformer that has split 120 primaries. These are usually found in equipment that can be wired for either 120 or 240 volts. The 120 windings are independent of each other and one can be used for primary and the other for a secondary. Do an ohmeter check to verify that there is no D.C. continuity between the windings. The volt-ampere rating is cut in half when a transformer is used in this manner. I've seen lots of old transformers at hamfests that have the split primaries, often available for a buck or less.

For a high current isolation transformer, I have used old television power transformers. Find a pair of boat-anchor-weight variety with closely matched high voltage secondaries and wire them back to back. Do not use the center taps. Extra 5 and six volt windings can be used to buck or boost as needed, provided they have sufficient current capacity. Or use one for a *real* pilot light. When I remove a transformer from a TV, I usually mark its wattage rating and label the

120 volt primary to make it easier to re-use. Do a thorough job of checking winding taps to for proper continuity to make sure all of the windings used are completely independent and not taps on a larger winding. Ground the metal shells or feet of the transformer to the green third wire of your three wire grounded power cord.

If your TV transformers have slightly different high voltage secondaries, wire them so that the one with the slightly lower secondary is the input transformer, then the result will be a proportionate lowering of the output to slightly below 120, back to what your boatanchor was expecting to begin with.

For some real volt-amperes, anybody try this with Microwave oven transformers, yet? On some models, one side of the high volt secondary is internally grounded. Don't recommend using that type.

By the way, I always test power transformers at a no load input much below actual 120 and compare outputs with a digital voltmeter. My preferred input voltage is 1.17 which is one/one hundredth of actual input. Secondaries are proportionate. This is just in case I guessed the wrong winding to be the primary.

I've got a question for you engineers. TV sets have a high value (several megs) resistor between AC input and chassis ground even in transformer operated sets. It main purpose is to prevent static discharge from breaking down the insulation between primary and secondary in TV power transformers. Is this ever a consideration in isolation transformers? How about a small neon bulb and high resistor between the windings? Is this appropriate? Breakdown of an isolation transformer or for that matter, any transformer, can be hazardous to your health.

Rich "I also use them for weight lifting" Post
post@ouvaxa.cats.ohiou.edu

Received: 24-Jun-1994 12:06pm

From ab4el.com Fri Jun 24 02:21:59 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: HQ-105TR

ul> From: ulowell!ihlpm.att.com!lou1 (Louis M Leciejewski

ul> Well, good to see all the Hammarlund discussion here! Hammarlund was
ul> always my favorite receiver...I really liked the styling. I had a

ul> HQ-170/VHF but sold it about 7 years ago. I still have the HQ-105/TR my
ul> Dad bought me as my first SWL receiver. I had lots of fun with that
ul> set...sending out for SWL QSL cards, etc. I added the Hammarlund XTAL
ul> Calibrator to it also. I also still have my Hammarlund HXL-ONE Linear
ul> Amp that I very seldom still use with my Kenwood XCVR. The HXL-ONE is a
ul> REAL Boatanchor!!!

Until I got the Ham Trader buyers guides (expensive and I wish they'd make some new photo Xeroxes -- they're grey blobs) I never knew Hammarlund made transmitters. I was kinda thinking of getting an HQ-105TR myself! GC receiver plus 1 CB or 10m channel! Certainly unusual. I saw one at the last Deerfield (Rochester) NH fest, but it was in horrible shape and had been modified.....oh well!

--Andy

... Man talking. Woman talking. Music. Man talking. (60 m. is soooo fun!)

From ab4el.com Thu Jun 23 17:26:44 1994
From: X90GALBRAIT1@wmich.edu
Subject: HQ-170 manual

Sorry to beg again, but I just figured that if I pull out that rotary switch I'd better have a schematic/manual to aid me in reinstallation (takin' 'er apart is too easy!)...

Anyone got an extra HQ-170 manual or a copy?
I'd gladly pay for the trouble.

73,
Chris KA8WFC

From ab4el.com Fri Jun 24 02:07:29 1994
From: Joe Reda/HQ/3Com <Joe_Reda/HQ/3Com@3mail.3Com.COM>
Subject: Re: HQ-215

Joseph,

I had an HQ-215 once, and obtained a (copy) manual from HI Manuals, P.O. Box 802, Council Bluffs, IA 51502. You have to send them \$2 for their catalog *before* you can order any manuals, but they do good copies.

73, Joe KC6TXU

----- Previous Message -----

To:
cc:
>From: JosephWP @ aol.com @ UGATE
Date: Thursday June 23, 1994 08:01 AM
Subject: Re: HQ-215

Rick,

I received my HQ-215s yesterday! They are really beautiful sets. A great addition to my boatanchor collection.

However there is one problem as I only have a partial copy of the manual. One of the rigs is in excellent condition. One is not (front panel problems, non-original knobs, rewired power input). Also there is no power cord for the really good set. I need to wire one up.

I am looking for a copy of the schematic. Any way that you (or someone else) can help me with this.

Joseph +

From ab4el.com Fri Jun 24 22:14:28 1994
From: aj092@yfn.ysu.edu (Kenneth V. Zichi)
Subject: HSN address

Jeff and others --

The new address (per the Spring 94 issue) of the Hollow State Newsletter is: Ralph Sanserino, PO Box 1831, Perris CA 92572-1831

A rag well worth the \$5 per three issues.... Usual disclaimers apply. 73 //kvz

--

kv zichi -->bz649@Cleveland.Freenet.edu
despite what the address above may say!

From ab4el.com Fri Jun 24 20:01:26 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Iso. Xfmrs. + Filters

to: boatanchors@gnu.ai.mit.edu

Hello Marc, KB0JPQ.

Re. the filter I used:

My filter was once again the result of a successful dumpster dive.

It seems that Sprague, Corcom, and others make prepackaged RFI / EMI filter blocks for the computer industry.

These are really neat packages. Mine is about the size of a brick, and is built in a sealed, tinned metal case with insulated terminals on each end.

There is a schematic on it, which shows a pair of dual Pi section filters (one in series with each lead), and they both use the case as common ground. The marked rating on this thing is, I believe, 15 Amps.

Being the cautious type, I put a "delta" of 130 VAC MOVs on BOTH sides of the filter block, in an attempt to keep big, hairy line glitches from lunging on the solid state radios (Drake R-8, Icom R-7000, Kenwood TS-140, Rat Shack scanners).

The filter is bolted inside of an electrical junction box to enclose the bolts that serve as in / out terminals. The junction box is solidly connected to the station ground.

The setup has done wonders to make VLF reception viable here; the noise level is a fraction of what it used to be.

Hope this info helps.

73,

Mr. T., K9TA

From ab4el.com Fri Jun 24 14:03:58 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>
Subject: Isolation Transformers

Hi Guys,

Concerning the isolation transformers we have been discussing with the

R390A, is this the same thing as something I've been using for my computer equipment:

Isobar noise filter and transient voltage surge suppressor 120V 50/60,
maximum load 15A, transient suppression voltage 300 L-N, 300 L-G, 400 N-G

Is this the same type of thing?

Menachem

From ab4el.com Fri Jun 24 04:19:27 1994
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: more tubes for sale

Hi Gang,
Here's another listing of someone selling tubes on rec.radio.swap.
73,
Jeff NH6IL

*****included text*****
Article: 12911 of rec.radio.swap
Subject: Radios & Tubes
>From: chris.campbell@woodybbs.com (Chris Campbell)

TUBES	\$3.00ea.	\$325.00all	>> All new never used <<

TUBE:	QUANTITY:	MANUFACTURER:	* ZEN = Zenith *
			* ITT = ITT *
42	1	NAT	* NAT = National *
80	2	1-NAT 1-?	* INT = International *
6HJ5	5	INT	* GE = General Electric*
6GY5	4	INT	* BRA = Bradford/Grant *
6KD6	3	GE	* DUM = Dumont *
8950	2	GE	* TUN = Tung-Sol *
37	1	NAT	* RAY = Raytheon *
41	2	NAT	*****
6GW6/6DQ6B	7	3-BRA 2-INT 2-GE	
6JB6A	6	1-GE 3-DUM 2-IEC	
6BQ6GTB/6CU6	15	10-INT 5-BRA	
78	2	1-ZEN 1-?	
77	1	?	
6GJ5A	2	INT	
6CU6	1	RAY	
12BQ6GTB	2	ITT	
12BY7A	3	2-DUM 1-INT	
6GW8	6	1-NAT 5-BRA	
6CL6	6	RCA	

7B7	2	NAT
7C6	2	?
6SC7	1	RCA
7A6	1	?
12AU6	10	5-GE 5-BRA
12BE6	2	GE
6AV6	5	GE
6DE7	10	8-RCA 2-GE
12AT7	6	BRA
6GK6	1	RCA
6BY8	1	GE
6BQ5	1	INT
6AQ5A/6HG5	1	GE
6C4	7	2-ITT 5-DUM
6CB6A	20	6-DUM 4-RAY 9-GE 1-INT
OB2	4	1-TUN 3-DUM

From ab4el.com Fri Jun 24 07:09:17 1994
 From: Jeffrey Herman <jeffrey@math.hawaii.edu>
 Subject: more tubes for sale

Hi Gang,
 Here's another listing of someone selling tubes on rec.radio.swap.
 73,
 Jeff NH6IL

*****included text*****
 Article: 12911 of rec.radio.swap
 Subject: Radios & Tubes
 >From: chris.campbell@woodybbs.com (Chris Campbell)

TUBES	\$3.00ea.	\$325.00all	>> All new never used <<

TUBE:	QUANTITY:	MANUFACTURER:	* ZEN = Zenith *
			* ITT = ITT *
42	1	NAT	* NAT = National *
80	2	1-NAT 1-?	* INT = International *
6HJ5	5	INT	* GE = General Electric*
6GY5	4	INT	* BRA = Bradford/Grant *
6KD6	3	GE	* DUM = Dumont *
8950	2	GE	* TUN = Tung-Sol *
37	1	NAT	* RAY = Raytheon *
41	2	NAT	*****
6GW6/6DQ6B	7	3-BRA 2-INT 2-GE	
6JB6A	6	1-GE 3-DUM 2-IEC	
6BQ6GTB/6CU6	15	10-INT 5-BRA	
78	2	1-ZEN 1-?	

77	1	?
6GJ5A	2	INT
6CU6	1	RAY
12BQ6GTB	2	ITT
12BY7A	3	2-DUM 1-INT
6GW8	6	1-NAT 5-BRA
6CL6	6	RCA
7B7	2	NAT
7C6	2	?
6SC7	1	RCA
7A6	1	?
12AU6	10	5-GE 5-BRA
12BE6	2	GE
6AV6	5	GE
6DE7	10	8-RCA 2-GE
12AT7	6	BRA
6GK6	1	RCA
6BY8	1	GE
6BQ5	1	INT
6AQ5A/6HG5	1	GE
6C4	7	2-ITT 5-DUM
6CB6A	20	6-DUM 4-RAY 9-GE 1-INT
OB2	4	1-TUN 3-DUM

From ab4el.com Thu Jun 23 17:23:02 1994

From: X90GALBRAIT1@wmich.edu

Subject: My dad always told me never to force anything mechanical!!

Ooops! Damn! #@%\$^&!! (insert curse-word here)!

Well, that fried filament line I was just fixing is going well, but the subassembly on the underside of the HQ-170 was blocking my path to a tube socket lead SO I though I'd push it back (ouch) a little bit and SNAP!... I busted part of the rotary switch that selects USB/LSB/BOTH.

Before shooting myself (but after kicking myself) I thought I'd ask you chaps if anyone has (or knows of anyone) who might have a "parting out" (dread the thought) Hammarlund HQ-170.

The part I need is #26303-1, a 4 section rotary switch (sideband selector).

Help!

73,

Chris, KA8WFC

From ab4el.com Fri Jun 24 09:39:26 1994

From: JosephWP@aol.com

Subject: Re: My dad always told me never to force anything mechanical!!

>>>

SO I though I'd push it back (ouch) a little bit and SNAP!...

I busted part of the rotary switch that selects USB/LSB/BOTH.

>>>

Gee, I thought I was the only one with a fatal case of 'break the set while repairing it.' It is good to know that I am not alone.

Joseph +

From ab4e1.com Fri Jun 24 12:49:59 1994

From: JosephWP@aol.com

Subject: Re: My dad always told me never to force anything mechanical!!

>>>

SO I though I'd push it back (ouch) a little bit and SNAP!...

I busted part of the rotary switch that selects USB/LSB/BOTH.

>>>

Gee, I thought I was the only one with a fatal case of 'break the set while repairing it.' It is good to know that I am not alone.

Joseph +

From ab4e1.com Fri Jun 24 13:22:24 1994

From: Richard E Robinson <rerobins@uncc.edu>

Subject: Re: My dad always told me never to force anything mechanical!!

Chris,

I had to rebuild a rotary switch in a Hallicrafters SX-43 that had burned. Save all the parts and with the help of epoxy and a magnifying glass, you may be able to repair it. Don't panic and throw any of it away. You might be suprised at how well it can be repaired.

Good luck,

Rick Robinson kf4ar

From ab4e1.com Thu Jun 23 19:17:11 1994

From: "MELUCAS, MARC P." <MELUCAS@wsmc-mis.af.mil>

Subject: NC-303

Gang-

I have an NC-303 I wish to sell, and I would appreciate any advice on what a fair and reasonable price would be. It has a crystal calibrator, no converters, face is clean, but the cabinet is a little scuffed up.

Thx. Marc
MELUCAS@wsmc-mis.af.mil

From ab4el.com Thu Jun 23 21:39:28 1994
From: "MELUCAS, MARC P." <MELUCAS@wsmc-mis.af.mil>
Subject: NC-303

Gang-

I have an NC-303 I wish to sell, and I would appreciate any advice on what a fair and reasonable price would be. It has a crystal calibrator, no converters, face is clean, but the cabinet is a little scuffed up.

Thx. Marc
MELUCAS@wsmc-mis.af.mil

From ab4el.com Fri Jun 24 02:23:22 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: QLF? (legs, feathers)

ul> From: Harris Boldt Edelman <ulowell!red-eft.la.ca.us!hbe>

ul> There's a flock of wild parrots that passes over my neighborhood twice
ul> each day during the Summer months. In previous years, when I'd yell,
ul> "hello," they'd reply with a chorus of "hello." This year, they've
ul> begun calling "hello" spontaneously when around my house.
ul> One day, I decided to yell, "dit." Their chattering coalesced into
ul> well-formed V's.
ul> NV6H can confirm that I'm not making this up.

Oh, golly. My best friend (worship him, he owns a GPR-90) was dating this girl with a parrot for a while. Unfortunately, she turned out to be a Fatal Attraction type and he went QRT. Before he split up with her, though, I suggested he bring a cassette of any convenient RTTY over there and play it for the parrot. THAT would be funny. Only thing worse would be that Rhythm of the Code tape. Here in New England that guy sets up at every ham flea I go to!

--Andy

... Engagement ring? Hmm. Wonder if she'll settle for a Ranger II instead?

From ab4e1.com Thu Jun 23 22:48:03 1994

From: Joe Reda/HQ/3Com <Joe_Reda/HQ/3Com@3mail.3Com.COM>

Subject: R-390A MANUAL

Neal, N4UYR says:

>Hi R-390A fans. I just received a brand new, original U.S. Army
>TM 11-5820-358-35! I'm sure you all recognize the number (Direct
>Support, General Support, and Depot Maintenance Manual: Radio Receiver,
>R-390A/URR).

>The National Technical Information Service (NTIS) handles all Army
>manuals now. I had ordered some weapons manuals from them in the past,
>so thought I'd try a radio manual. The answer came back: yes it is
>available. Price is \$27.00 + 3.00 shipping. I faxed them my order &
>credit card # on 12 Apr. Received the manual in the mail 22 Apr. \$30 may
>seem high, but it is in PERFECT condition (it is a newer printing), with
>lots of big foldouts. You can order from the human phone number by
>giving them document # and credit card #.

>The address is: NTIS
> 5285 Port Royal Rd.
> Springfield, VA 22161

>FAX: 703-487-4841

>Live human: 703-487-4684

>Neal N4UYR

Well, I got mine yesterday, and it was worth the \$30 and the wait. Not only is the copy much better than you get from Fair, it has all the updates through 1988 (!). I'm going to find out if they have the military manual for the SP-600 series; I have a copy already but again, there may be updates!

Joe KC6TXU

From ab4e1.com Fri Jun 24 16:33:01 1994

From: Schroeder.Wbst207V@xerox.com

Subject: RBA & AN/GRC-9 Wanted

Hollowstaters,

I would like to find an RBA receiver, hopefully in working condition and reasonable physical shape. Not looking for mint condition.

Additionally, would like to find an AN/GRC-9 military receiver / transmitter, hopefully in working condition and reasonable physical shape. Not looking for mint condition.

Any leads would be appreciated.

Thanks,

Russ W2DYY

Schroeder.Wbst207V@Xerox.com

From ab4el.com Fri Jun 24 14:26:42 1994

From: dev1!stang@tesla.elen.ssd.fsi.com (SnapRoll Gilstrap)

Subject: Re-forming Caps

While reading the thread on BA safety with interest, I've seen a couple of references to re-forming electrolytics. This is something I've heard about a number of times but now that I've ordered a nice BA from Don Merz my interest in re-forming caps is more than academic. Don talked to me about checking the caps in an old radio and I have a pretty good idea of what to do. But I have to admit that my knowledge about the reformation process itself is pretty lame. Could someone enlighten me about this? In other words, what's going on inside that capacitor during this. I have a general, if hazy, knowledge about types and construction of caps but I'd like to get a better handle on the reformation process before I try to put it into practice.

Thanks - Stan

-

Stan Gilstrap - WB5LBH, stang@tesla.elen.ssd.fsi.com
FlightSafety International - Simulation Systems Division
Broken Arrow, Oklahoma (Home QTH - Inola, OK)

From ab4el.com Fri Jun 24 16:37:34 1994

Subject: Re: Re-forming Caps

From: R.G. Keen <keen@austin.ibm.com>

In forming or reforming, the action of electric current in the electrolyte solution in a capacitor is to grow aluminum oxides on the surface of one of the aluminum plates. If the current is low, there is little or no self heating at the site(s) of current flow, and the oxide grows rather than the capacitor being shorted at such sites. The effective depth and hence voltage punch through rating of the oxide layer increases with the time that the current flows. Once formed, the oxide layer is stable for units of years. Over decades, the oxide may locally dissolve or erode so that a sudden application of "rated" voltage punches through the now-thinner oxides. By slowly forming thin sites back up to rated, this process is avoided. The first-formed oxides are very thin, so a capacitor is initially low voltage and high capacitance. As the oxide layer gets thicker, the withstand voltage goes up and the capacitance goes down because the plates of the capacitor (being the aluminum and the electrolyte) are separated by a greater distance of dielectric.

The trick to re-forming is to keep the current low, either with a current source or a high-value resistor. I've been told that the quality of the oxide layer is proportional to how slowly it is formed. Most re-forming is done with a rated-voltage supply and a resistor of 100K or greater. Stop re-forming when the voltage across the 100k gets to just a few volts.

R.G.

From ab4el.com Fri Jun 24 02:11:48 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Re. Iso. Transformers

to: boatanchors@gnu.ai.mit.edu

Hello, People.

Re. Jim Dillon's comments on isolation transformers, all I can say is "right on". ALL of my receivers, BA or not, are run through a BIG honkin' isolation transformer (like, would you believe a 10 AMP continuous rating @ 220 VAC?).

My reason for this tactic isn't primarily safety; that's just a fringe benefit.

A large part of my SWLing is on long wave and VLF. The AC power line is a MAJOR noise source at that frequency, as are ground loops. The addition of an isolation transformer by itself dropped the racket level at 15,734 Hz (TV horizontal oscillator frequency) by at least 10 - 15 DB! Adding an L/C filter on the secondary side (i.e., between transformer and receivers) lowered the VLF crap level even more. As pointed out, a filter in this position can safely be tied to a good earth ground.

For non-BA gear there's an advantage to this system too IN THEORY, at least.

Line spikes probably lose much of their punch, since they don't go thru the transformer by virtue of magnetic coupling; they are propagated by capacitive coupling between the windings. The use of MOVs on the secondary (across the winding, and from each end to ground) probably makes things a lot safer for solid state gear. At least that's the theory...

BTW, big transformers like this COST if you're not into scrounging.

Mine came out of a junked rack of Sanborn (medical division of Hewlett Packard) diagnostic electronics that wound up in a hospital's dumpster. This mutha weighs about 75 pounds, and has dual primaries and secondaries. It now lives in the bottom of my receiver rack, and serves to anchor down a pair of R-390s; ya gotta have some weight to keep 'em from blowing away in the slightest breeze <GRIN>!

Mr. T., K9TA

From ab4el.com Fri Jun 24 13:24:06 1994
From: CHRIS _ PRUSSING <RMCP@tundra.alaska.edu>
Subject: Re:R390 iso.grounds,etc.

Menachem and crew:

The R390A pulls 225 watts with the ovens switch on, 140 with ovens off. I suggest ovens off, but in any case a 300 watt iso should handle about any receiver.

BTW: my "ground" philosophy-

Always strive to have the best electrical/safety/RF grounds, but always assume that you have none of the above.

The removal of the line bypasses or for that matter running a rig on an isolation trans presupposes that you have a decent antenna/RF ground, thus obviating need for the RF bypass function of those leaky caps. Remember that the R390 was sometimes fed with a short whip, in which case those bypasses made the RF ground to the frame of the half-ton or whatever.

Don't mess with the R390 unless your meter shows 30 or more volts between case and "ground" or less than a couple megohms between plug blades and case. it is an inherently safe radio. I just got annoyed with being zapped by mine (48 volts, only a meg isolation resistance as I recall).

BTW- regarding grounding to water pipes: We live in a plastic age. Does that copper pipe really get out of the building without being interrupted by some plastic pipe or the (required by plumbing code)insulating fittings on the water heater? They are there even if the pipe is copper/steel! As to the stake driven into the ground: in winter, frozen ground conducts not a whit. And have you ever tried to drive a ground stake? You can bet that stake goes down about as far as the guy felt like pounding before cutting it off short. We lay the

stkes out as horizontal radials centered on and bonded to the "code" one driven vertically. This also forms the RF ground common point attached to the antenna tuner. Galvanized chicken wire buried a few inches down helps some, the more the merrier. All this because we live in a rain forest where all the salts have been leached out of the soil and the rainwater conducts about as well as deionized water, i.e. not at all. In the winter, freezes down five feet, and ice is also a zero conductor. All of the above could be flip-floppped for desert/sandy soil conditions. Same philosophy: keep trying for electrical neutrality, but never assume you have attained the mythical "good ground".
Jim Dillon RMCP@Tundra.Alaska.Edu

From ab4el.com Fri Jun 24 13:22:24 1994
From: HAK1%IC%DCPP@bangate.pge.com
Subject: re:Variacs, Iso, etc even MORE

With all the volumes of data posted re: iso xfmrs/variacs I hope someone is saving them for a FAQ message for the next time this subject comes up. We've generated enough on this subject to fill a small book !

Howard AD6Y
hak1@pge.com

From ab4el.com Fri Jun 24 00:19:11 1994
From: CHRIS _ PRUSSING <RMCP@tundra.alaska.edu>
Subject: Re:Variacs, Isol. xfmrs sources

Fellow Tingleers-

Tired of that Reddy Kilowatt look? Leakage Paths got you down? Tired of running down to reset the GFI?

If you really want a Variac, they can be had new from Electronic Warehouse Inc. on Coney Island Av. in Brooklyn or there's always one somewhere in the pages of ARC. They are a variable autotransformer offering no isolation from ground referenced electrocution hazard. BTW the NEC (National Electrical Code) should be renamed the Electrical Union and Bar Association Benevolence Act. Everything is a voltage referenced to ground, which is never there until your body comes between one side of the line (always 50-50 odds) and ground (wet floor, concrete, whatever).

Electrical user distribution in the rest of the world (excluding North America and Mexico and our former possessions) although done at 220/240 volts is much safer (and efficient). It is not referenced to ground (i.e. the white wires in the service entrance

are not screwed to a buss bar that has a wire running outside bolted to a copper stake driven Vampire-Killer style into the usually non-conductive sandy soil. What does complete the path to ground? Usually some poor frizzy-haired soul who comes in contact with an even slightly closer to ground "neatral" like the wet floor/kitchen sink.

Ground Fault Interrupters sometimes open up the hot side of a circuit when this happens, but they are totally impractical because most of our electrical appliances (especially when the have a pair of .05 mfd caps from each side of the line to the cabinet) leak like a sieve- far mor e than the microamps imbalance that trigger a GFI. Solution:

Do what the rest of the world does when they have to use an American electrical appliance: Buy an isolation transformer. These are a true transformer. There's no DC path between source (line) and load (radio). And the reference to ground so highly prized by our Voodoo Code is broken. You have to TRY HARD to get killed with an iso in the circuit 'cause they got fast acting fuses in that holder.

Why are hospitals in N. America the only places that are wired like the rest of the world? To avoid explosion of anaesthetic gases from sparking and untoward trips of personnel across the room due to reaction to shock (electrical), and to protect patients i.e. heart cases who may be hyper-sensitive to leakage currents.

How much current can do you in?

Fact: the 'S' meter on most BAs is full scale at one (1) milliampere. 1-5 ma level of perception (tingle, Vincent)

10 ma " 'pain

100ma " 'severe muscular contraction (You dropped your R390?)

we have just passed the DC requirements of an HRO

100-300ma Electocution

Above from Joe Carr Old Time Radios Restoration and Repair. TAB Books
Where do I get an isolation transformer? Anywhere that deals in International Trade in Radios, Electrics.

If you aren't near a port, I have them. A 300 watt is about \$25.

Side benefit: These have primary taps for under/over volts so they can be used to run an old rig on lower voltage to reform the electrolytics, i.e. you can se the primary for 220. You will get about 60 volts out which is just right for overnight break-in of an old rig that hasn't been powered up for a long time. Set primary for 240, secondary will step up a bit more,,, you get the idea.

These come in 50, 100, 200, 300, 500 and larger wattages. Are fused. *NOT UL APPROVED* (UL=Undertakers Lab) for reasons above (i.e. *NOT* referenced to ground.

Jim Dillon RMCP@Tundra.Alaska.Edu

From ab4el.com Fri Jun 24 01:06:39 1994
From: bill@rosevax.rosemount.com (William Hawkins)
Subject: Re:Variacs, Isol. xfrmrs sources

That's some interesting stuff on the idea of isolation versus grounding. My first job was at a blasting cap plant in Port Ewen, NY, in 1960. Blasting caps use primary explosives, that are easy to set off. I was surprised to find that they ran the 440 VAC power as open Delta, rather than grounded Wye. But there was a ground fault detector, and the plant electrician had to find any fault as soon as it was detected. The reason? One fault would not hurt anything (especially not get something thermally hot). The second one would be a problem. With a grounded Wye, the first fault can be a source of heat. Anything 110/220 was grounded per code, however.

Seems to me it takes a special isolation transformer to reduce the capacitive coupling to the grounded primary so that you don't get tingled by that current. Can't draw enough to do any damage (from one wire) from that current, though. As the instrumentation amplifier people put it, you're safe from common mode faults, but not from normal mode (across the winding).

Bill (Jim's right, you know. Safety means never assuming anything.)

From ab4el.com Fri Jun 24 11:33:57 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>
Subject: Re:Variacs, Isol. xfrmrs sources

>Do what the rest of the world does when they have to use an
>American electrical appliance: Buy an isolation transformer.
>These are a true transformer. There's no DC path between
>source (line) and load (radio). And the reference to ground
>so highly prized by our Voodoo Code is broken. You have to
>TRY HARD to get killed with an iso in the circuit 'cause they got fast
>acting fuses in that holder.

Hi Guys

Back to the R390A. If one doesn't remove those line caps/filters, and one doesn't fully trust his life to the ground, what rating auto transformer should be used with the R390A? Will this remove the potential danger?

Menachem

From ab4el.com Fri Jun 24 09:52:06 1994
From: Scott_Johnson-AZAX60@email.sps.mot.com
Subject: RE>BA safety, grounding, te

Reply to: RE>BA safety, grounding, test bed
I often see nude variacs (i.e. no case) around at swaps, junk stores etc.
I fabricated mine using a Sola 1KVA c.v. xfmr followed by a genuine 10 A. GR
Variac. Meters for I, E, and power and good Heinemann magnetic trip circuit
breakers on input and output. I also used a current xfmr and an amplifier
circuit to provide a variable current trip for the out put breaker, which can
be tripped remotely by the application of 115 VAC to an internal coil. As I
recall, this is called a shunt trip breaker. If anyone is interested in this
circuit, I will provide a schematic and parts list for a SASE.

Date: 6/23/94 23:49
To: Scott Johnson
>From: Andy.Wallace@f278.n324.z1.fido
ul> From: "James H. Haynes" <ulowell!cats.ucsc.edu!haynes>

ul> Which reminds me - an outlet with a GFI is probably a good thing to
ul> have around boatanchors too.

I got a nice Eico variac supply at the last flea, for \$15. Good
for 8 Amps, fused before and aft, metered with current and voltage. Nice
find! I was looking for a variac and meters to build my own, but this
saved me the trouble.

The ideal setup would be an isolation transformer leading to a
metered variac and ending with a 3-wire outlet. Hmm. I smell an Electric
Radio article! Even better would be some sort of "current alarm" such
that if something draws more than X once you set the level it will power
off. Might be good for powering up -- and leaving on to "condition" --
the old things.

--Andy

... Drakes: black 'n' grey and they keep your cat warm...

From ab4el.com Thu Jun 23 18:04:41 1994
From: Scott_Johnson-AZAX60@email.sps.mot.com
Subject: RE>Re- Boatanchor Safety Qu

Reply to: RE>Re: Boatanchor Safety Question
Real men don't need GFCI's and don't mind getting knocked senseless occasionally.

Date: 6/23/94 13:55
To: Scott Johnson
>From: jkearman@arrl.org@azbcsml
Encoding: 20 TEXT
X-Mailer: Microsoft Mail V3.0

>Bill Hawkins has looked
>into this and he and I both believe it has something to do with the line
>filters on the R390A. Does anyone else have problems with their R390A and
>GFCI's? If not, is your line filter removed?

Bill and I got into this once before. For the benefit of you new readers, my advice is to remove the line filters and any capacitors from the line to the chassis. You don't need them on a receiver. The 390 was designed to be used in bays with dozens of other receivers, so they didn't want RF on the power lines. Line filters do cause leakage to the chassis and can be DEADLY. I emphatically do not think we should be talking about calculated risks here. There is absolutely no reason to imperil your life merely to listen to an R-390. Only a fool trusts a ground wire or a GFCI. Use them, certainly, but don't trust your life to them.

73

Jim Kearman, KR1S
Assistant Technical Editor, ARRL etc etc

From ab4el.com Thu Jun 23 18:15:55 1994
From: Scott_Johnson-AZAX60@email.sps.mot.com
Subject: RE>Re- FAQ- VARIACs

Reply to: RE>Re: FAQ: VARIACs
Any good electronic jobber stocks variable autotransformers
Ohmite, Staco, and Superior are representative companies.

Date: 6/23/94 14:33
To: Scott Johnson
>From: bwb@triad.com@azbcsml
Organization: Triad Systems Corp.
Division: Customer Services, Product Support

X-Mailer: ELM [version 2.4 PL22]
Content-Type: text
Content-Length: 615

In a previous message, Roy Morgan said:

|
| The word "Variac" was a registered trademark of the General Radio Company
| of Concord, Massachusetts, but the company's gone, and the name has become
| a generic term applied to all similar devices. GR made the best, IMHO.
|
| Finally, there's nothing like a variac.
etc...

What are some sources for new Variacs? I've seen a few at the swaps,
but are usually old and beat up. I've looked in the Fair Radio catalog,
but I've either missed 'em or they weren't there. Any ideas?

--

-Bruce Bacon (bwb@triad.com) KE6GLS ** disclaimer ** - My views, not theirs.

From ab4el.com Fri Jun 24 22:31:24 1994
From: Nothing in moderation...! 24-Jun-1994 1323 <brewer@anarky.enet.dec.com>
Subject: Rebuilding switch wafers.....

Regarding the tale of woe about the 170 switch.....
switch wafers CAN be rebuilt....it just aint easy!
/john

From ab4el.com Thu Jun 23 22:51:28 1994
From: Joe Reda/HQ/3Com <Joe_Reda/HQ/3Com@3mail.3Com.COM>
Subject: Re: Reconditioning Mercury Vapor rectifiers

Geez . . . do you have to do this to types 82 and 83 also??

\\JR KC6TXU

----- Previous Message -----

From ab4el.com Fri Jun 24 13:52:29 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>

Subject: Removing AC Line Bypass Caps/Filters R390A

Hi Guys,

How would one remove those AC line bypass caps/filters on the R390A? How many are there, and is it simply a matter of snipping?

Thanks,

Menachem
mgalatz@panix.com

From ab4el.com Fri Jun 24 14:28:58 1994
From: "Kearman, Jim" <jkearman@arrl.org>
Subject: RE: Removing AC Line Bypass Caps/Filters R390A

This is getting out of hand. My coworker, Dave Newkirk, just found the front page of an older newspaper in his desk, with the headline:

SCHULTZ SAYS HE WAS BYPASSED

There in the photo is George Schultz taking an oath, right hand raised, standing in front of the Great Seal of the US. But the photo has been modified by a ham: George has a .01 disk ceramic cap across his ears....

73

Jim

From ab4el.com Thu Jun 23 17:50:20 1994
From: "Kenan, Larry" <larryk@frick.sandiegoca.NCR.COM>
Subject: Re[2]: FAQ: VARIACS

>In a previous message, Roy Morgan said:

>|

>| The word "Variac" was a registered trademark of the General Radio Company |
>| of Concord, Massachusetts, but the company's gone, ...

I believe that the General Radio Co. is now known as GenRad. I don't know if they still manufacture variacs. They do build Automatic Test Equipment (ATE) which is a logical progression from the signal generators etc. that they built in the days of the boatanchors.

Larry Kenan - KD6CKR

From ab4el.com Thu Jun 23 19:34:18 1994

From: "Kenan, Larry" <larryk@frick.sandiegoca.NCR.COM>

Subject: Re[2]: FAQ: VARIACs

>In a previous message, Roy Morgan said:

>|

>| The word "Variac" was a registered trademark of the General Radio Company |
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I believe that the General Radio Co. is now known as GenRad. I don't know if they still manufacture variacs. They do build Automatic Test Equipment (ATE) which is a logical progression from the signal generators etc. that they built in the days of the boatanchors.

Larry Kenan - KD6CKR

From ab4el.com Fri Jun 24 02:21:18 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: S-38C etc.

ul> From: "Kevin Anderson" <ulowell!Augustana.edu!GGANDERSON>

ul> I still have my FRB -- my dad's S-38.

ul> It sits prominently on my desk at home, still with the same
ul> antenna wire attached that it always used and propped up on
ul> some pieces of wood to tilt the front just as I did years
ul> ago (I guess habits don't die).

You're not alone! I know of several Drake R-8 users who prop theirs up with wood because the dang flimsy front feet broke off. I've heard they'll replace them for free, but it's a travesty that Drake didn't make them out of aluminum.

I have an S-38DM myself. I bought it partly because it has the world cities marked on the rectangular dial... It also has a woodgrained metal cabinet. People tell me that was common but I haven't seen another at the New England fleas I've been to.

If I decide to sell the S-38DM I'll let you know!

--Andy

... ..I thought it was DIP the grid and PEAK the plate!

From ab4el.com Fri Jun 24 02:21:20 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Silliness with BAs on TV

"CR> From: "James C Reid" <ulowell!ccmail.emis.hac.com!0093373>

"CR> I've noticed in quite a few of the postings(especially from Tom,

"CR> K9TA) how many boatanchors have appeared in the movies and

"CR> television.

Well, this won't make anyone rush to the sets, but I remember one episode of Lost in Space where Smith or someone met this alien machine of some kind. The machine "spoke" as a colored bulb mounted in an old horn radio speaker blinked on and off. The rest of the "machine" was decidedly unradiolike.

Another one: Radar's radio in M*A*S*H. Anyone ID it?

The sitcom ALF: the dad was a ham. I think it was a call with too many numbers, but I remember oscilloscopes and whatever in the garage. Anyone see any namebrand rigs there?

All in all, radio, and ham radio in particular, is singularly misrepresented on TV! Maybe we DO spend too much time in dank cellars doing unholy electronic things.

--Andy

... If I ever become a daddy it had better be to a pair of Drake twins!

From ab4el.com Fri Jun 24 19:28:05 1994

From: TOM.A.ADAMS@mail.admin.wisc.edu

Subject: Span Masters

to: boatanchors@gnu.ai.mit.edu

Just a contribution to the Knight-Kit "Span Master" lore being collected here.

I, too wound up with one.

My dad gave a guy at work \$5.00 for one, after he put it together and couldn't make it play.

Dad went thru the assembly manual and found the wiring error, and the old

beast played beautifully (or at least as well as a 2 stage regenerative COULD play).

The Span Master taught me the value of headphones. A grade school kid who got into BCB DXing HAD to have them, because this thing would, without warning, break into an earsplitting howl at 3 AM. This was guaranteed to bring parental wrath down upon your head in it's full fury!

I still remember hot summer Sunday nights in Chicago, waiting for WCFL to sign off at 1000 KC, so I could hear the somewhat later signoff, and rendition of "Oh Canada", from CBW at 990 KC. After that, it was up to 1570 KC to catch Paul Kalischer spinning country western records on XERF, 250,000 watts from Ciudad Acuna Cochilla Mexico (translated into English it meant Del Rio, Texas).

After a year or so, Dad decided I needed a more sophisticated bit of weaponry, so a Hallicrafters S-120 appeared under the Christmas tree, and a couple of months before that a mint Hallicrafters S-38A had appeared at the local Goodwill store for \$8.00 . The lady at Goodwill was kind enough to keep the set under the counter for 2 weeks until I could hustle up enough deposit bottles to buy the silly thing!

But on Christmas night, the old Span Master stepped into a new role.

I had been reading enough to learn the characteristics of the regenerative detector. So, I tried an experiment.

A hand key was connected from the Span Master's antenna terminal to the skywire, and the regeneration pot got turned up all the way, while audio gain was turned all the way down.

Thus was my first transmitter born! The S-120 was the receive side of the station!

I was an unlicensed 8 year old, and in my naivety I fully expected the FCC to come roaring in to arrest me at any moment, but I was having so much fun I didn't give a damn!

Mr. T., K9TA

From ab4el.com Thu Jun 23 17:34:21 1994
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: tubes for sale

From ab4el.com Fri Jun 24 12:05:07 1994
From: "Mark Glusker" <glusk@mechcad3.esd.sgi.com>
Subject: Variacs and Isol Xformers

I've read through all the posts and I need to confirm one thing -

Assume I bring the line voltage into the primary of an isolation transformer and take the secondary to a variac. Then, the output of the variac goes to an three-pin outlet to plug the radio into. I am assuming that the ground pin of the outlet/plug should not be connected to anything, otherwise you defeat the purpose of the isolation transformer.

Is this right, or did I just kill myself?

From ab4el.com Fri Jun 24 15:12:31 1994

From: "Kenan, Larry" <larryk@frick.sandiegoca.NCR.COM>

Subject: Re: Variacs and Isol Xformers

>From: Mark Glusker <glusk@mechcad3.esd.sgi.com

>Is this right, or did I just kill myself?

You should connect the ground pin of the isolated three pin power outlet to the normal power ground (green wire).

Larry Kenan - KD6CKR

From ab4el.com Fri Jun 24 13:47:02 1994

From: CHRIS _ PRUSSING <RMCP@tundra.alaska.edu>

Subject: Variacs and Isol xfrmrs

Mark and Isolationists-

Again, there is a distinction to be made between the iso as a service bench item (I advocate) and for operation (I don't unless it is hazardous AC/DC rig which should be safety-restored). For service work, you do not want to ground reference anything plugged into the secondary of the iso (that's why you are using it- to eliminate the ground-referenced house wiring situation). Plug the variac into the secondary of the iso and you will have a safe way of having continuously variable AC.

Why not use iso for routine operation (as opposed to cabinet off servicing)? The radio needs an RF ground to operate, and there goes your isolation! I am assuming that most antenna/ground setups have an earth connection (either intentional or accidental!). Nothing wrong with using the iso as a line filter to reduce mostly capacitive line noise.

Or, Mark , you could hit a few more Long's Drugs for a Superradio II,

fill it with Duracells, and not worry about all of above.
Jim Dillon RMCP@Tundra.Alaska.Edu just South of Cicely

From ab4el.com Fri Jun 24 12:05:50 1994
From: CHRIS _ PRUSSING <RMCP@tundra.alaska.edu>
Subject: Variacs, Iso, etc even MORE

Fellow De-Tinglers-

Couple of clarifications-

The bypasses we refer to are **not** bypass capacitors in general, only the line bypasses found between the power cord incoming and the primary of the power transformer. Which to remove?

If you have a "good" U-ground outlet and you have replaced the original BA power plug with a polarized one, UNPLUG the cord and trace the narrow blade wire into the radio, past the power switch (although sometimes line bypasses are before it) to the primary winding terminals on the power transformer. Somewhere along there will be a waxy or plastic .0? @600 volt going to the chassis. Clip it out. If you haven't gone safety ground polarized (and why not? It costs \$1.29.) follow both line wires and clip the bypass on each (since you don't know which side of the radio's cord will be 'hot').

On the R390 the line bypasses are part of FL101, located dead center underchassis on the rear apron-right behind the PTO above a bathtub C103. Two wires go into each side. Remove all four wires from FL101 and splice ones from left to ones from right (either left to either right o.k.-just don't tie together any two wires from any one side). When plugged into an external EMI/RFI power strip, the filtering function of FL101 will be done by the strip and that annoying 40-50 volt tingle will be reduced considerably.

BTW, I am not advocating running most rigs on an isolation tranny. I am suggesting using one when the patient is opened up on the table and there is any chance you may become part of its circuit while troubleshooting. You or your test gear. Put the patient and the aging Grid-dipper or Heath/Eico whatchit on the iso. And have you checked the old test gear for leakage/safety-polarized cords? Everything re: BA safety applies about double to test gear (vintage).

AC/DC BA radios:

There are lots of good ones (my S22R Skyrider Marine and National NC-46 come to mind, Echophone Commercial, too). They weren't just a cheap way to leave out the power transformer. In the GOD (Good Old Days) parts of town (usually those along the (DC traction motor) Trolley line were wired DC- at least in commercial buildings (lower rate) like hotels/apartments. I recall this in Washington (DC) as late as early Fifties.

Also boats often were (still sometimes are) wired DC, so radios aimed at that market had to be DC (or in the case of earlier models like SW-3, FBX could be fitted with directly (DC) or Indirectly heated filament tube lineups.

Some of these rigs-the Hallicrafters/Echophones especially, including the S-38s are extremely dangerous when the insulating washers between the case (cabinet) and chassis degrade or are inadvertently/carelessly left out. Go over them carefully with the leakage tester. Convert them to polarized cords, and only display/use with a known to be good U-ground outlet/strip. You can't go into an AC-DC set and simply remove the bypasses (unless you really don't care about performance) although replacing them with modern critical safety-rated caps would be a real good idea.

BTW the low cost isolation transformers are often labeled Step Up/Step Down Transformer after their primary (but not necessarily invoked) function; they can run 120 in and 120 out. Or you can set them to get a slightly lower voltage out like the radios ran on in the GOD, thus minimizing need/temptation to go into wholesale replacement of the rest of the caps in the rig. In the GOD line voltage ran somewhat less than the 120 we (but not our vintage rigs) enjoy today.

Jim Dillon RMCP@Tundra.Alaska.Edu

From ab4el.com Fri Jun 24 01:44:00 1994
From: CHRIS _ PRUSSING <RMCP@tundra.alaska.edu>
Subject: Variacs, iso, etc MORE

Fellow Zappists-

I'm trying to finish this post while trying to identify the (so-far) five BAs seen in Radar Secret Service on Mystery Science Theater. If you want to see more BA rigs than Ray Moore has in his basement, ask your cable co. to carry The Comedy Channel or swing over to Galaxy 5, transponder 1 or Sat F3R tr 21. I digress....

So what about safety grounds and why were those caps in the primary of the radio in the first place...?

remember that these BAs co-existed with AC-Dc sets, which , if you connected a ground wire to...Well, there was a 50-50 chance that you/the radio/the house/all of above were dead meat well done. Even if you lucked out...

remember changing 15 amp plug fuses on open panel post and tube service boards? Well, folks were reluctant to ground anything, so the bypasses formed sort of the counterpoise RF ground for the skyhook, but of course they put the whole faulty towers "ground" in series adding the blender motor... Yes, cut them out! My favorite trips across the shack rigs are SX-28 and R-390. Even with "good" bypasses you've got 60 volts on the cabinet.

So what do I do about bypassing stray RF, noise, etc. now that I've clipped these out and combed my hair straight again?
Surge Strip with letters EMI/RFI displayed on wrapper. EMI= Electro-mechanical Interference, RFI=Radio Frequency Interference, both self explanatory. Available for \$7 from any Hardware/Computer joint. And they have six outlets, so you can plug the whole rack of BAs into one. And they have a switch, so you can sleep tight without worrying about gangs of electrons sneaking in or out of your BABies....
More about this sometime on a Chautauqua Re: Common Mode Ground Faults:why H-P Laserjet I/O board should have 12AX7s. Stay tuned.
Jim Dillon RMCP@Tundra,Alaska.Edu
list

From ab4el.com Fri Jun 24 10:35:36 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>
Subject: Re: Variacs, iso, etc MORE

>service boards? Well, folks were reluctant to ground anything, so the
>bypasses formed sort of the counterpoise RF ground for the skyhook,
>but of course they put the whole faulty towers "ground" in series
>adding the blender motor... Yes, cut them out! My favorite trips
>across the shack rigs are SX-28 and R-390. Even with "good" bypasses
>you've got 60 volts on the cabinet.

OK: is all you have to do is to clip something in the radio? That's it?
How many line bypass caps are there in the R390A, and is it an easy
procedure? Can someone give a step by step instruction on this?

From ab4el.com Fri Jun 24 02:22:54 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Wonders of galena...

CC> From: ulowell!thumper.bellcore.com!cotton (Chase Cotton)

CC> My oldest and possibly still my most favorite radio books (well at
CC> least the first book), (i.e. radio books I've *owned* the longest)

CC> 1) "The Boy's First Book of Radio and Electronics", (green)
CC> by Alfred Morgan, illustrated by Alfred Morgan and Walt Reed,

CC> 7 - crystal detector holder
CC> I always wanted to build the crystal sets in the books exactly
CC> as shown (varnished wood blocks, etc.), but always ended up
CC> using something expedient.

CC> 3 - how to build a more selective crystal receiver

I got a piece of galena for 50c at a local rock and mineral shop and took it to work to see how well it rectified... We have a couple of Huntron Tracker 2000 curve-tracer gadgets for in-circuit troubleshooting. They're not as useful as the HP 1652 analyzers, but anyway.... I used a piece of #30 wire-wrap wire, cut at an angle for a sharp point, with the Tracker to see the trace of the galena. I tried all over the crystal and couldn't really get a good "elbow" like a diode, or even anything close to it. Perhaps my galena doesn't have the right impurities. It could also be that the Tracker's impedance is wrong, and there really IS an 'elbow' there but only at microvolt levels like I'd see in an actual crystal radio.

I potted a chip of the galena on a penny with solder. I'll try it in my old Radio Shack crystal (1N34) radio and see if it works at all.

This is probably drifting off the BA subject, too!

There is also The Crystal Set Society. I haven't read a recent issue but they've been around for a while. AES has the first 2 years of back issues, I think. Some interesting circuits. I haven't tried any because I'm cursed with an indoor antenna only.

Best xtal set I built was in a 1976 (?) Popular Science issue, with the coil wound on a Diamond Crystal salt tube. Excellent performance. Of course, I killed it by trying to make it "better" or "prettier" and the parts went into the junk box... I still have the issue *somewhere* and if I find it in my Spring (Summer) cleaning I'll post the circuit details.

Crystal sets should be required building for every child!

--Andy

... Dual VF0s? In the same cabinet? Naw...that's not a real radio!

From ab4el.com Fri Jun 24 13:42:28 1994

From: "Kenan, Larry" <larryk@frick.sandiegoca.NCR.COM>

Subject: Re: Wonders of galena...

>I potted a chip of the galena on a penny with solder. I'll try
>it in my old Radio Shack crystal (1N34) radio and see if it works at
>all.

>--Andy Wallace

That temperature could destroy the rectifier characteristics of the galena. The crystal detectors of old were potted in "woods metal" which melts at less than 100 degrees C. It would better to rig up a clamp of some sort to hold the galena for the test.

Larry Kenan - KD6CKR